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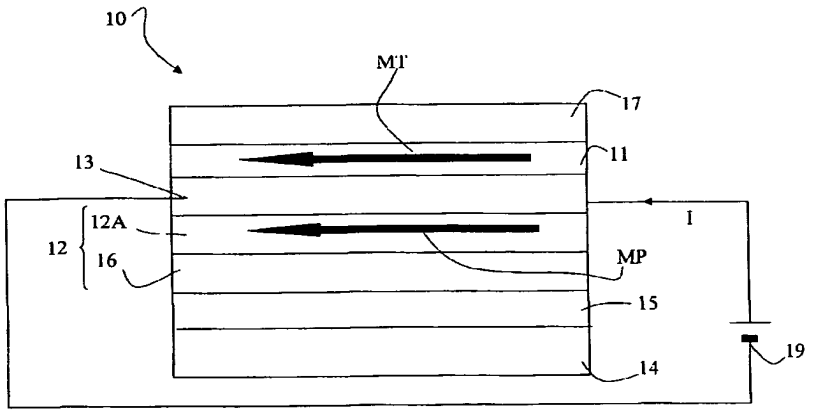
(54) Title: MAGNETIC TRANSDUCTION SENSOR DEVICE, MANUFACTURING PROCESS AND DETECTION PROCESS THEREFORM



(57) Abstract: Magnetic pressure sensor device, of the type comprising at least one magnetic layer (11) able to vary a magnetisation associated thereto in response to a pressure (P) exerted thereon. Said device (20; 30; 40; 50) comprises a plurality of layers (11, 12, 13, 14, 15, 16, 17) arranged in a stack, said magnetic layer (11) able to vary a magnetisation associated thereto in response to a pressure (P) comprising a free magnetic layer (11), able to be associated to a temporary magnetisation (MT), said free magnetic layer (11) belonging to said plurality of layers (11, 12, 13, 14, 15, 16, 17), which further comprises at least a spacer layer (13; 23; 33) and a permanent magnetic layer (12) associated to a permanent magnetisation (MP). Said sensor device (20) further comprises a compressible layer (21; 31; 42) and a layer with high magnetic coercivity (22; 32; 42) associated to said plurality of layers (11, 12, 13, 14, 15, 16, 17).

WO 2005/033644 A3